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Kittilä, Seppo

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Causative morphemes as non-valency increasing devices[1]

Seppo Kittilä
University of Helsinki

Causativization is typically understood as a morphologically signaled process which introduces an agent to the valency of verbs, thus yielding constructions with *n+1* arguments. This clearly constitutes the core of causatives, and many languages across the globe have means of expressing this function. In addition, causative morphemes may attach to verbs without affecting the valency of verbs and/or the number of arguments in clauses in any way. These are examined in this paper. Three types of non-prototypical uses of causative morphemes will be distinguished, based on whether causativization has consequences for the number of participants in the denoted event, the degree of agency associated with the instigator, or the transitivity of the denoted event in general. These three types are labeled COVERT CAUSATIVIZATION, AGENTIVIZATION and TRANSITIVIZATION. In addition to providing a systematic overview of non-prototypical uses of causative morphemes, the rationale behind the attested types and their relation to the causative prototype will also be discussed. The goal of the present study is to show that causativization involves more than the mere introduction of an agent. In so doing, it aims to broaden our perspective on causativization.

Keywords: causatives, causativization, agent, patient, transitivity, valency

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1. Introduction

Causatives and causation constitute a recurring topic in linguistics (see e.g. Shibatani 1976a, 2002; Comrie & Polinsky 1993; Song 1996; Dixon 2000, among many others). Studies of causatives have focused on such areas as grammatical relations and formal treatment of the causee in causatives, and on the differences between various semantic types of causation including direct, indirect and manipulative causation (see Song 1996: 2 for a summary of studies dealing with causatives during the last three decades; Dixon 2000 also provides a good overview of causatives). Causativization is typically viewed as a morphologically signaled process (expressed by manipulating the form of the verbal predicate), which introduces an agent to the valency of verbs yielding verbs (and clauses) with *n+1* arguments. This kind of definition has been proposed, for example, by Comrie:

> If the non-causative verb has a valency *n* (takes *n* arguments), then its causative equivalent will normally take *n+1* arguments, since in addition to the arguments of the non-causative verb, the causative verb also includes reference to the causer of the action. (Comrie 1975: 2)

An example of causativization, as defined above, is given in (1).

Turkish (Comrie 1975: 5)

(1) a. *ali* *öl-dü*
PN:NOM die-PAST
'Ali died'

b. *ali* *hasan-ı* *öl-dür-dü*
PN:NOM PN.ACC die-CAUS-PAST
'Ali killed Hasan'

The examples in (1) illustrate the (morphological) causativization of intransitive verbs in Turkish (transitive and ditransitive verbs can also be causativized in the same way in Turkish). The number of overt arguments increases by one in (1b), since an agent is introduced by the causative morpheme.

Studies of causatives have in common that they almost exclusively examine formal and semantic features of valency-increasing causatives, such as those in (1), which is only natural, since causatives are usually defined in light of these constructions. However, morphemes used for causativization (agent introduction) have an array of other functions as well. A rather typical example is

illustrated in (2):

Finnish (personal knowledge)

(2) a. *henkilö* *laihtu-i* *4.86 kilo-a*
person:NOM lose.weight-3SG: PAST 4.86 kilogram-PART
'a person lost 4.86 kilograms of his/her weight (spontaneously, without conscious effort)'

b. *henkilö* *laihdu-tt-i* *4.86 kilo-a*
person:NOM lose.weight-CAUS-3SG:PAST 4.86 kilogram- PART
'a person lost 4.86 kilograms of his/her weight (intentionally)'

In (2), the causative morpheme *-tt-* (see [3] for an example of the use of the affix as a valency-increasing causative morpheme) does not have an agent-adding function, and the number of arguments (comprising all clausal constituents referring to participants in events) in (2b) is maintained. Semantically, (2a) and (2b) differ in the degree of agency accorded to the referent of the subject. In (2a), losing weight is conceptualized as a spontaneously occurring process, while in (2b), the same process is seen as a result of a conscious effort by the agent, such as a strict diet combined with regular exercise, which renders the degree of agency higher in this sentence.

The focus of this paper will be on cases such as (2). In the cases to be discussed, the verb is (morphologically) causativized as in (2), but in contrast to typical causativization, illustrated in (1), this does not have consequences for the number of arguments in the clause. It is, though, important to note that in addition to the functions discussed below, all the (causative) morphemes considered in this paper must also have an agent-adding function elsewhere.They are thus causative morphemes, which also have other (non-valency increasing) functions. Nevertheless, the current discussion will only consider morphological causativization and the non-valency increasing uses of causative morphemes.[2] First, morphological causativization represents the prototype of causativization in many languages (see Section 2 for a more detailed discussion). Lexical causativization does in some cases denote more direct causation than morphological causation (see e.g. Shibatani 2002: 109ff), but it makes little sense to discuss the (potential) non-causative uses of lexical

[2] The use of causative morphemes as a marker of passive (as in Korean) is not discussed in this paper. The focus of this paper is on cases that can be explained by the causative prototype, while the polysemy of passive and causative requires a different kind of explanation and thus deserves a study of its own.

causatives. The same applies to analytic causatives (e.g. ***make*/*let*** *someone walk*). The verbs used in these cases usually express causativization only secondarily in addition to their lexical uses.

Some notes on terminology are in order before we proceed. First, in this paper causativization is seen as a cross-linguistic primitive. By this I mean that it is here taken for granted that all languages have some way of formally signaling the fact that an agent/external causer is introduced into the denoted event. Languages vary significantly with regard to how this primitive is expressed and how the notion is divided formally (for example, whether there are formal differences between direct and indirect causation, see also Dixon 2000: 62–74). An alternative analysis would be to claim that certain elements, such as agentivizing affixes, have a causative function in favorable conditions. Yet not all languages express this function through the use of causative morphemes. These differences have direct consequences for whether we can assume there to be a causative prototype or not. In this paper, such a prototype is assumed and the examined cases are discussed in light of this prototype (see §§2.2–3 for a definition).

This paper pursues two goals. First, it aims at providing a systematic overview of the non-valency increasing functions that causative morphemes may have across languages. Instances of non-prototypical causativization have been examined elsewhere (see e.g. Kulikov 1993), but a systematic examination is – to the best of my knowledge – still lacking. The cases examined here are divided into three main types, based on similarities with and differences from the causative prototype. The proposed typology is based primarily on the semantic effects causativization has on the affected clauses. Formal features associated with causativization are less relevant to the discussion here. Consequently, subtypes will not be distinguished according to criteria such as potential differences in causee encoding. On the other hand, cases in which causativization increases the agency associated with the instigator of the event, and cases in which causativization has consequences for the affectedness of the patient, will both be viewed as instances of different types, regardless of whether these are distinguished formally or not. Second, by examining the semantic and formal features of non-valency increasing uses of causative morphemes, the paper aims at broadening our perspective on causatives. Most of the examined functions are explainable on the basis of the proposed prototype, but the cases scrutinized only display some features of the causative prototype, and lack others. This underlines the relevance of the causative prototype, but also shows that causativization as a whole comprises more aspects than mere agent

introduction. The taxonomy presented in Section 3 is not meant as a typology of languages, but as a general presentation of different instances of non-valency increasing causatives. It should also be noted that this paper is primarily a theoretically oriented one, whose purpose is to serve as a basis for possible future studies on causatives. The study presented is not based on a systematic examination of a carefully selected language sample, and thus cannot be seen as genuinely typological in nature. Nevertheless, cross-linguistic predictions about what kinds of non-prototypical functions causative morphemes may have are made.

2. Defining the causative prototype

2.1. Preliminaries

In this section, I will discuss the causative prototype[3] from both a formal and a semantic perspective. The discussion is based on morphological causativization of (unaccusative) intransitive verbs and the formal and semantic features associated with this process (unless otherwise indicated). There are two reasons for this. First, causativization of unaccusative verbs can be regarded as complete both semantically and formally. The former means that the event denoted by the underlying clause lacks all features of agency, including control, willingness and volition (the only participant of the denoted event is a patient), which are then introduced via causativization (in case the introduced agent is a canonical agent, such as in the proto-agent sense of Dowty 1991). The agent introduction is therefore complete. The latter means that the introduced agent occupies the subject slot and makes the original subject a direct object, which produces a canonical transitive clause within the language in question (usually a nominative-accusative or an ergative-absolutive construction, depending on the language). The change is from a typical intransitive to a typical transitive construction. Second, all languages with any kind of morphological causativization permit morphological causativization of unaccusative verbs (see also

[3] The label "prototype" is here defined as a construction displaying the highest number of features potentially relevant to defining the notion in question. This is in line with Shibatani's definition of the passive prototype (see Shibatani 1985: 837). Whether this kind of construction is also the most frequent one across languages is not relevant to the discussion here.

Bugenhagen 1995: 174; Rice 2000: 199), while morphological causativization of other verb classes may be more restricted in nature (see e.g. Nedjalkov & Sil'nitskij 1969; Song 1996: 174f). The definitions below do not substantially add to our understanding of causativization, but it is necessary to spell out the features relevant to the following discussion.

2.2. Formal features

Agent introduction and changes in verb morphology are both recognized features of causativization, and they are characteristic of causativization irrespective of the valency of the underlying verb (see e.g. Comrie 1975: 2). However, as already noted, the discussion will focus on causativization of (unaccusative) intransitive verbs, and clauses involving this kind of verb. An example was provided in (1a,b) from Turkish, and another example is found in (3):

Finnish (personal knowledge)

(3) a. *ikkuna* *hajo-si*
window:NOM break-3SG:PAST
'a window broke'

b. *henkilö* *hajo-tt-i* *ikkuna-n*
person:NOM break-CAUS-3SG:PAST window-ACC
'a person broke a window'

(3a) exemplifies the canonical intransitive clause pattern of Finnish. The clause has one argument bearing nominative case marking, and the verb is morphologically unmarked for valency. (3b) illustrates the causativized counterpart of (3a); the verb bears a causative affix, which increases verb valency by one. The introduced external causer (agent) occupies the subject slot – characterized by the nominative marking and the ability to trigger verbal agreement – while the subject of (3a) is in the accusative and consequently serves as the direct object of (3b). With regard to argument marking, (3b) corresponds to the basic transitive clause pattern of Finnish. The only (minor) difference is that (3b) illustrates a derived transitive construction.

To summarize: the causative prototype, as it is to be understood in this paper, can be FORMALLY defined as follows:

1. The verb is overtly marked as a causativized verb by attaching a causative morpheme (such as an affix) to it.

2. The valency of the affected verb increases from 1 to 2. The introduced agent argument occupies the subject slot (i.e. the agent usually occurs in the nominative or the ergative case depending on the basic alignment of the language), while the subject of the underlying clause surfaces as a direct object (in the accusative or in the absolutive).
3. Prototypical causativization produces constructions that correspond formally to the basic transitive construction of the language in question. Depending on the language, the construction is usually either a NOM-ACC or an ERG-ABS-construction (or ERG-ACC in some cases).

2.3. Semantic features

The introduction of an external causer (agent) into events also constitutes the central semantic feature of prototypical causativization (see also Shibatani 1976b: 1–2; Kemmer & Verhagen 1994: 117–119). Events denoted by causativized clauses have an external causer lacking in the underlying intransitive event (see Shibatani 1976b: 1–2). This is the primary difference between causativized and non-causativized clauses regardless of the number of arguments in the underlying clause (see Comrie 1975:1–2).

Causativization of unaccusative verbs, and the causation of events denoted by these verbs, is here taken as the starting point for defining the causative prototype semantically (see also Lakoff 1987: 54f). The most important reason for this lies in the degree of (semantic) transitivization associated with this causativization type. All features of high semantic transitivity[4] apart from patient affectedness are lacking in a spontaneously occurring event, such as 'The ice melted', whereas they are parts of the event denoted by a causativized clause, such as 'The professor melted the ice'. Since the underlying event involves an affected patient, the introduction of the agent thus produces a canonical transitive event. This is evident also in (3). The event described in (3a) has only one participant, which undergoes a visible change of state (from being intact to being broken), and the event is viewed as occurring spontaneously without a salient causer/agent. In (3b), on the other hand, the introduced agent is conceived of as directly causing the change of state in the patient. The patient

[4] The term "semantic transitivity" is in this paper understood as a multilayered notion, comprising such features as agency, affectedness of the patient and definiteness (see e.g. Hopper & Thompson 1980). "Valency", on the other hand, is used when referring to the number of arguments a verb can (maximally) take.

undergoes the same change of state as in (3a), but in (3b) the change of state is induced externally by a salient agent (see e.g. Lakoff 1987: 54; Givón 1995: 76). Causativized unaccusative clauses denote semantically transitive events instead of intransitive events.

The causative prototype can be SEMANTICALLY defined as follows (see also Lakoff 1987: 54f; Dixon 2000: 77 for similar prototypes):

1. In the causative prototype, an external causer (agent) is added to an intransitive event denoted by the underlying intransitive clause.
2. All features of agency are introduced into the causativized clause. This means that the agent's participation in the resulting event is volitional, controlled and purposeful, and the agent is clearly the primary cause of the event in question; the event would not have occurred if the agent had not induced it. The agent also targets its action directly at the patient and it is the aim of the agent to cause a change of state in the patient.
3. The agent introduction produces a prototypical transitive event involving a salient cause (agent) and a salient effect (patient). In canonical cases, the agent is fully unaffected by the event in which it partakes, while the patient is thoroughly affected and thus registers the effect of the described event. Causativization does not have any major consequences for the affectedness of the patient.

3. A typology of non-valency increasing causatives

3.1. Preliminaries

In this section I will examine three types of non-valency increasing causatives. These are distinguished using semantic and formal criteria. Similarities with and differences from the causative prototype, as defined in §2, are illustrated in Figure 1.

	Arg+	Part+	Ag+
Causative prototype	+	+	+
Covert causativization	–	+	+
Agentivization	–	–	+
Transitivization	–	–	–

Figure 1. The causativization continuum, from causative prototype to least canonical instances

In Figure 1, Arg+ refers to cases in which an overt argument is added to the causativized clause. Part+ means that a participant is added to the denoted event, while Ag+ refers to the introduction of a prototypical agent. The causative prototype – as the label is used in this paper – comprises cases in which a participant, namely an agent, is introduced to the underlying (intransitive) clause; see (1b) for an example. This means that all features of Figure 1 are present in the causative prototype. Covert causativization resembles the causative prototype semantically in adding a participant, an agent, to the denoted event, but this is not manifested at the level of overt arguments, whose number is maintained (although the semantic roles borne by the arguments are often re-arranged, see below). In agentivization, the number of participants remains constant, but a volitionally acting, controlling agent is introduced. In contrast to the causative prototype, the underlying event involves a salient causer, but its degree of agency is either low, or not specified. Consequently, Ag+ is a part of agentivization, while Part+ is not. Transitivization comprises cases in which causativization increases the semantic transitivity of an event, but when the increase is not explainable on the basis of agency. All four types will be explored in the following sections in light of cross-linguistic data. The relevant data will first be illustrated, followed by a discussion of the rationale for each instance of non-prototypical causativization.

3.2. Covert causativization

Covert causativization refers to cases in which an external causer is introduced into the event denoted by the causativized clause, but in which the number of arguments is not affected (the type is consequently Part+, Ag+, but Arg–). The presence of *n+1* arguments is only implied, and not expressed overtly. Typical examples of covert causativization are presented by languages in which monoclausal constructions have restrictions on the number of overt arguments (usually the limit is three, but there are languages that allow a higher or lower number of arguments, see e.g. Song 1996: 174ff; Kittilä 2007), which renders the causativization of certain verbs ungrammatical. Examples are given in (4) and (5) from Songhai and Awa Pit:

Songhai (Comrie 1975: 9f, cited from Shopen & Konaré 1970: 215)

(4)	a.	*ali*	*nga-ndi*	*tasu*	*di*	*musa*	*se*
		Ali	eat-CAUS	rice	the	PN	IO
		'Ali made Mousa eat the rice'					

b. *garba neere-ndi bari di musa se (*ali se)*
garba sell-CAUS horse the Musa IO (Ali IO)
'Garba had Musa sell the horse' (or: 'Garba had the horse sold to Musa')

Awa Pit (Curnow 1997: 72, 162)

(5) a. *na = na kuzhu piya kwa-nin-ta-w*
1SG:NOM=TOP pig corn eat-CAUS-PAST-LOCUT:SUBJ
'I let the pig eat corn'

b. *demetrio = na carmen = ta pala kwin-ti-zi*
PN=TOP PN=ACC plantain give-PAST-NONLOCUT
'Demetrio gave Carmen a plantain'

c. *na = na demetrio = ta pala kwin-nin-ta-w*
1SG.NOM=TOP PN=ACC plantain give-CAUS-PAST-LOCUT:SUBJ
'I made Demetrio give a plantain' (or: 'I had a plantain given to Demetrio')

(4a) and (5a) exemplify typical causativization (of transitive clauses) in Songhai and Awa Pit. The Causee occupies the indirect object slot in Songhai, while in Awa Pit the Causee surfaces as a direct object. Ditransitive verbs, as in (4b) and (5c), may also be causativized. However, in contrast to (in)transitive verbs, the number of overt arguments is not affected, even though a participant is introduced, as the free translations of (4b) and (5c) show. In Songhai and Awa Pit, the number of core arguments (comprising subjects, direct objects and indirect objects) is limited to three, which excludes an overt reference to all four participants in (4b) and (5c). The semantic role assignment of the arguments is affected, with the causer occupying the subject slot and the direct object referring to the Causee (this is optional in Songhai) in causativized ditransitive clauses.

In (4) and (5), overt reference to all participants is completely excluded. In addition, many (or perhaps even most?) languages allow variation in the number of arguments in causativized clauses. Two examples of this are (6) and (7):

Finnish (personal knowledge)

(6) a. *lapsi sö-i puuro-n*
child:NOM eat:PAST-3SG porridge-ACC
'a/the child ate the porridge'

b. *henkilö* *syö-tt-i* *lapse-n* *(puuro-lla/*-n)*
person:NOM eat-CAUS-3SG:PAST child-ACC (porridge-ADESS/*-ACC)
'a person fed the child (with [the] porridge)'

c. *henkilö* *syö-tt-i* *puuro-n* *lapse-lle*
person:NOM eat-CAUS-3SG:PAST porridge-ACC child-ALL
'a person fed the child with porridge' / 'a person fed the porridge to the child'

d. ??*henkilö* *syö-tt-i*
person:NOM eat-CAUS-3SG
??'a person fed'

Tukang Besi (Donohue 1998: 3f)

(7) a. *no-manga=mo* *(te* *pandola)*
3R-eat=PF (CORE eggplant)
'they ate (eggplants)'

b. *no-pa-manga* *di* *anabou* *na* *mansuana*
3R-CAUS-EAT OBL child NOM parent
'the parent fed the child'

c. *no-pa-manga* *te* *ika* *na* *mansuana*
3R-CAUS-eat CORE fish NOM parent
'the parent fed fish'

d. *no-pa-manga* *te* *ika* *di* *anabou* *na* *mansuana*
3R-CAUS-eat CORE fish OBL child NOM parent
'the parent fed fish to the child'

e. **no-pa-manga* *na* *mansuana*
3R-CAUS-eat NOM parent
*'the parent fed'

Examples (6a) and (7a) illustrate canonical transitive constructions of Finnish and Tukang Besi, while (6b–d) and (7b–e) are causativized clauses derived from (6a) and (7a). Causativization has not affected the number of overt arguments in (6b) and (7b–c). In Finnish, the Causee surfaces as a direct object if it is the only non-subject argument present, as in (6b). The Patient cannot surface as a direct object, even when the Causee could be inferred (i.e. clauses such as *Vanhempi syötti puuron* 'The parent fed the porridge' are infelicitous). The Patient may only appear in the adessive case in (6b), which is rather interesting given the fact that the adessive usually codes the Causee in Finnish. Formally (6b) resembles any causative construction of Finnish (derived from a transitive verb), but the assignment of the semantic roles of arguments is in fact the reverse: the Causee bears accusative marking, while the adessive codes the

Patient in (6b). Tukang Besi allows for both the Patient (7b) and the Causee (7c) to be left to inference in causativized transitive clauses. If a clause includes both a Patient and a Causee, the Patient occupies the direct object slot, while the Causee surfaces as an indirect object. What is also of interest is that causativization increases the number of OBLIGATORY arguments in (6) and (7). The underived verb 'eat' allows the Patient to be freely omitted in both Finnish and Tukang Besi (along with many other languages, see e.g. Naess 2007: Chapter 4). By contrast, causativized 'eat' requires at least two of the arguments to be present, which renders (6d) and (7e) at best highly marginal. To summarize, in (6) and (7) causativization yields clauses with *n+1* potential arguments and verbs with *n+1* obligatory arguments, but the result is not necessarily *n+1* overt arguments.

The (rather frequent) occurrence of covert causativization is not unduly surprising. In both prototypical and covert causativization, an external causer is introduced to the denoted event. The types are distinguished by the fact that the increase in the number of arguments is explicitly expressed only in prototypical causativization. Three things appear to be relevant to covert causativization. First, many languages have restrictions on the number of overt arguments in monoclausal constructions, which results in covert causativization of certain verbs. This claim is further strengthened by the fact that covert causativization is especially typical of ditransitive verbs. Such verbs already involve three (core) arguments, which is the limit for many languages, such as Songhai and Awa Pit (see also Song 1996; Kittilä 2007). These formal restrictions may also have a psychological function, since clauses with four arguments (or even five in some languages) are undoubtedly hard to process.

Second, closely related to the restrictions on the number of arguments, ambiguity avoidance is relevant here (see Kittilä 2007: 486–498 for a more detailed discussion). It may be claimed that covertness of causativization in cases such as (4) and (5) follows from the need to avoid two identically marked overt arguments. This explanation seems particularly valid for the covert causativization of ditransitives. In a number of languages, Causee and Recipient bear identical coding (e.g. a dative affix), which yields formal ambiguity if both arguments appear in a single clause. This is also the case in Awa Pit and Songhai (see also Comrie 1975: 14). Two identically marked animate object arguments are not tolerated, so one of them remains covert. Other facts also support the ambiguity avoidance explanation. The risk of ambiguity is very low for causativized intransitive clauses, and they are thus easily causativized. The risk is somewhat higher in causativized transitive clauses, and consequently there are

more languages that restrict their causativization (see e.g. Song 1996: 174). The risk is the highest for ditransitive clauses, and because of this a number of languages only allow covert causativization of ditransitive clauses. This claim is further strengthened by the fact that morphological causativization of ditransitives is more easily tolerated if Causee and Recipient bear distinct coding (see Kittilä 2007 for examples).

Third, arguments are frequently omitted for other reasons than those mentioned above, for example, because their identity is retrievable from the context. This is relevant to the occurrence of covert causativization as well. In some cases, the omission has been grammaticalized and is thus obligatory, as in (4) and (5), while in others, as in (6) and (7), the omission is closer to the free omission of arguments in general. Cases such as (6) and (7) are not rare across languages. What is noteworthy is that causativization increases the number of obligatory arguments in clauses, as (6d) and (7e) show. In light of covert causativization (be this optional or obligatory) causativization can be viewed as a semantically defined process, which adds an agent to the event denoted by the underlying clause, but with the reference to at least one of the participants remaining covert.

3.3. Agentivization

Agentivization comprises instances of causativization, in which the number of participants (and also arguments) is maintained, but where agency is clearly affected. Features of agency affected by agentivization comprise volitionality, control, willingness and purposefulness of the action (see Dixon 2000: 62, 77). In the present study, subtypes of agentivization will not be distinguished based on these individual properties, since agency is here viewed holistically. The main reason for this is that a meaningful distinction between individual agency properties is often very difficult to draw or is itself artificial, since the features involved co-vary (i.e. volitionality often implies, yet does not entail, control and purposefulness). In contrast to the causative prototype, the underlying event has an external causer/instigator in agentivization, but the original causer is either unagentive in nature (e.g. because it does not initiate the event intentionally) or its degree of agency is not specified, and causativization is used to underline the high degree of agency associated with the agent. Formally, two subtypes of agentivization can be distinguished based on whether argument marking is affected or not. In the first subtype, the argument marking remains constant

and the two clauses are distinguishable formally only by means of verb morphology. Examples are given in (8)–(10):

Godoberi (Kibrik 1996:128)

(8) a. *mak'i-di* *łeni* *ĉibi*
child-ERG water splash:PAST
'the child splashed the water (perhaps involuntarily)'

b. *mak'i-di* *łeni* *ĉib-ali*
child-ERG water splash-CAUS:PAST
'the child splashed the water (purposefully and repeatedly)'

Tarascan (Maldonado & Nava L. 2002: 175)

(9) a. *eratzini* *misitu-ni* *t'wá-rhi-s-ø-ti*
Eratzin cat-OBJ spit-LOC-PERF-PRES-3:IND
'Eratzin spat towards the cat'

b. *eratzini* *misitu-ni* *t'wá-rhi-ta-s-ø-ti*
Eratzin cat-OBJ spit-LOC-CAUS-PERF-PRES-3:IND
'Eratzin spat aiming at the cat'

Finnish (personal knowledge)

(10) a. *henkilö* *laihtu-i* *(4.86 kiloa)*
person:NOM lose.weight-3SG:PAST (4.86 kilograms)
'a person lost (4.86 kilograms of his/her) weight' (i.e. without making any effort)

b. *henkilö* *laihdu-tt-i* *(4.86 kiloa)*
person:NOM lose weight-CAUS-3SG:PAST (4.86 kilograms)
'a person lost (4.86 kilograms of his/her) weight' (i.e. this was his/her intention: weight was lost as a result of a strict diet, for example)

The only formal difference between the *a* and *b* examples lies in the presence of the causative affix in the latter. Semantically, the clauses differ from each other in agency, the degree of which is higher in the *b* examples, as the free translations show. In (8a), a child splashes water (perhaps) unintentionally, while in (8b) the same act can only be viewed as intentional and purposeful. The use of the causative affix excludes unagentive readings in (8b). In (9a), the spitting may be accidental, while in (9b) the agent is consciously trying to spit at the cat. In Tarascan, *-ta-* always stresses volitional causation, while other mechanisms, such as the affix *-ku-*, are usually neutral as regards agency (Maldonado & Nava L. 2002: 175). In (10a), the process of losing weight is seen as occurring spontaneously, while in (10b) losing weight is conceived of as an

intentional act which follows from, for instance, a strict diet. In sum, the *b* examples involve canonical agents, while the *a* examples may involve atypical agents. Formally this is expressed by causative affixes.

The other subtype of agentivization is illustrated by cases in which causativization has consequences for argument coding (but not their number). Consider:

Tatar (Lyutikova & Bonch-Osmolovskaya 2002: 4)

(11) a. *marat-ka* *samat* *yčyra-dy*
Marat-DAT samat meet-PAST
'Marat met Samat (accidentally)'

b. *marat* *samat-ny* *yčyra-t-ty*
Marat Samat-ACC meet-CAUS-PAST
'Marat met Samat (deliberately)'

Tsez (Comrie 2000: 365, 368)

(12) a. *uži-q* *č'ikay* *y-exu-s*
boy-POSS glass:ABS II-break-PAST.WIT
'the boy accidentally broke the glass'

b. *uñ-ā* *č'ikay* *y-exu-r-si*
boy-ERG glass:ABS ii-break-CAUS-PAST.WIT
'the boy broke the glass'

c. *aħo-r* *meši* *b-esu-s*
shepherd-LAT calf:ABS III-be found-PAST.WIT
'the shepherd came across the calf'

d. *aħ-ā* *meši* *b-esu-r-si*
shepherd-ERG calf:ABS III-be found-CAUS-PAST.WIT
'the shepherd (sought and) found the calf'

In (11) and (12) too, the number of overt arguments is maintained despite the morphological causativization of the verb, but in contrast to (8)–(10) causativization here has consequences for argument marking. Examples (11a), (12a) and (12c) can be regarded as extended intransitives (a term adopted from Dixon & Aikhenvald 1997), because they involve a zero marked core argument (either in the nominative or in the absolutive) and an obliquely marked constituent. (11b), (12b) and (12d), in turn, have two core arguments, and their argument marking corresponds to the basic transitive construction of the respective languages. We may therefore say that the number of core arguments is affected as a result of the causativization in (11) and (12), even though the number of clausal constituents is maintained. It is worth noting here that I have

not come across examples of causativized extended intransitives in which argument marking would not be affected (which is not to say that they do not exist). This provides evidence for the general transitivizing nature of causativization.

Even though agentivization does not increase the number of participants, the rather frequent use of causative morphemes for this function is understandable. In both agentivization and the causative prototype, the underlying event lacks a canonical agent that is introduced by causativization, and the result is thus a highly transitive event. The two instances of causativization differ in the completeness of agent introduction. Agent introduction is complete in the causative prototype, since all features of agency are lacking in the underlying event. In agentivization, agent introduction is less complete, because the underlying event already involves a salient external causer. Agentivization thus affects individual agency features, such as volition and control, instead of introducing the agent as a participant. We should perhaps add that intransitive events such as 'die', 'melt' and 'break' are not completely spontaneous either, and occur only in favorable conditions. For example, ice melts only at certain temperatures. Melting is viewed as externally caused if someone purposefully causes the temperature to rise above zero thus instigating the melting. An accidental causation of these events is also possible, for example, if someone forgets to turn down the heat causing ice to melt. In light of this, it is also easy to see how prototypical causativization and agentivization are related, which explains the use of causative morphemes for both of these instances of causativization. It should be noted that agentivization is not possible if the event denoted by the underlying clause involves a canonical agent (as in 'a person broke an entity on purpose'). The result is consequently the introduction of an external causer, not an agent that would perform the denoted action. As long as a canonical agent is lacking, causativization may agentivize less than prototypical agents.

3.4. Transitivization

3.4.1. Preliminaries

The last type of causativization discussed in this paper is not related to agent introduction in any direct way. Rather, the cases examined below exploit the general transitivizing function associated with the causative prototype leaving agency in the background (see Figure 1 and also Lakoff 1987: 54f). This is in

clear contrast to the other two examined types, which are based on the agent introduction aspect of causativization. The features discussed in this section comprise directness of causation, intensification of events (an especially high degree of patient affectedness), punctuality, expression of definiteness, and dynamicity, all of which are considered integral parts of semantic transitivity (see e.g. Hopper & Thompson 1980: 252). The first two of these seem to be expressed by causative morphemes in a fair number of languages, while the three latter features are less frequently associated with causative morphemes. As a result, the first two features are discussed in their own subsections below, while the remaining three are discussed together in Section 3.4.4.

3.4.2. Directness of causation

The change of state in the patient follows directly and immediately from the action carried out by the agent in canonical transitive events (see e.g. Comrie 1989[1981]: 165; Song 1996: 4). Directness (and/or a more physical/intense nature) of causation is highlighted by causative morphemes, for example, in Jarawara, Buryat and Oromo, as shown in (13)–(15):

Jarawara (Dixon & Aikhenvald 1997: 82)

(13) a. *babeo* *hoti-ke* *(Yobeto* *ehene)*
paper:FEM have holes-DECL:FEM (PN:MASC due.to:MASC)
'the paper has holes (due to Yobeto)'

b. *yobeto* *babeo* *na-hoti-ka*
PN:MASC paper:FEM CAUS-have holes-DECL:MASC
'Yobeto made holes in the paper'

Buryat (Lyutikova & Bonch-Osmolovskaya 2002: 2)

(14) a. *bi* *xaranxy-haa* *aj-n-ab*
I darkness-LOC afraid-PRES-1SG
'I am afraid of darkness'

b. *shi* *namaj-e* *aj-lg-an-ash*
you 1SG:OBL-ACC afraid-CAUS-PRES-2SG
'you frighten me'

Oromo (Kulikov 1993: 128, cited from Dubinsky, Lloret & Newman 1988: 487)

(15) a. *terfaa-n* *gurbaa* *raff-is-e*
Terfaa-NOM boy sleep-CAUS-AGR
'Terfaa put the boy to sleep (e.g. by rocking him)'

b. *terfaa-n* *gurbaa* *raff-is-iis-e*
Terfaa-NOM boy sleep-CAUS-CAUS-AGR
'Terfaa made the boy sleep (e.g. by giving him a sleeping pill)'

The examples in (b) encode a more direct causation, which is formally manifested in the morphological causativization of the verb – in (15b) by doubling the causative morpheme. In (13) and (14), there are also changes in argument marking. Example (13a) describes a scene in which a piece of paper has holes in it due to the carelessness of Yobeto, who may, for example, have negligently left it close to a fireplace, resulting in the paper partly burning, leaving holes in it. On the other hand, (13b) is more appropriate if Yobeto purposefully makes holes in a piece of paper, directly causing a change of state in the patient. Example (14a) refers to a general habit of being afraid of the dark. The triggering factor of the fear (darkness) does not need to be present when the clause is uttered. In (14b), in turn, the referent of the subject has done something to cause the causee to be afraid (this may be intentional or not). In (15b), the doubling of the causative morpheme indicates that the causation is more forceful/direct in nature than in (15a). In (15a), falling asleep is viewed as occurring semi-spontaneously, while in (15b) causation is conceived of as more direct in that a sleeping pill eventually makes the child sleep. Directness of causation is, perhaps unsurprisingly, frequently expressed by causative morphemes. Further examples cen be found in Finnish and Babungo (Schaub 1985: 211), Yimas (Foley 1991: 300) and Arabic (Premper 1988: 30f).

Some readers may object to discussing directness of causation as an instance of transitivization rather than of agentivization. It is true that directness of causation and agency are intimately related, but since these notions are not associated with each other in any NECESSARY way, they are discussed separately in this paper. Causation can be either direct or indirect irrespective of the degree of agency associated with the instigator. For example, Terfaa is primarily responsible for the change of state in the patient in both (15a) and (15b). The agent is also acting volitionally in both cases, in spite of which the directness of causation varies. On the other hand, an agent can be directly responsible for an event without intentionally causing an event to occur. An example is provided by a scene in which someone accidentally breaks a vase by extending his/her arm. The causation is very direct, but not intentional. In sum, there are cases in which directness of causation and agency correlate, but this is not necessary. However, this close relation of agentivization and directness of causation explains well the frequent highlighting of directness of causation by causative

morphemes. In (13)–(15), events denoted by non-causative clauses have an external cause, and similarly to events denoted by (8)–(12) the causer is not a canonical agent. Both in agentivization and in cases where causativization highlights directness of causation, the result is an event with a canonical agent, but the highlighted feature (the feature that is lacking in the underlying event) is different. Directness of causation is also intimately associated with high transitivity and the causative prototype, which also explains its expression by causative morphemes.

3.4.3. Intensification

Another evident feature of high semantic transitivity, and one expressed relatively frequently by causative morphemes, is illustrated by intensification of the denoted action. The action is performed more intensively by the agent and/or the patient may be more thoroughly affected (these two are rather closely related). Examples are provided in (16)–(19):

Tariana (Aikhenvald 2000: 158)

(16) a. *na-suku-i-pidana* *naha* *itsida-pe-ne*
3PL-fall-CAUS-REM.PAST.INFR they turtle-PL-INSTR
'they (devils) made (some woodchips) fall down with the help of turtles (axes)'

b. *phia* *nuha* *panisi-nuku* *pi-sa-bala*
you 1SG house-TOP:NON-A/S 2SG-hit-EVERYWHERE
pi-suku-i-ta-ka
2SG-go.down-CAUS1-CAUS2-DECL
'you destroyed my house completely' (lit. 'hit everywhere - make come down (said the evil spirit to a man in his dream'))

Chichewa (Hopper & Thompson 1980: 264)

(17) a. *mwana-'yu* *w-a-dy-a*
child-this he-TENSE-eat-IND
'the child has eaten'

b. *mwana-'yu* *w-a-dy-ets-a*
child-this he-TENSE-eat-CAUS-IND
'this child has eaten too much'

Taba (Bowden 2001: 202)

(18) a. *tit* *t=wonga* *maliling* *ya*
1PL:INCL 1PL:INCL-stay.awake.all.night night up
'we stayed awake all last night'

b. *tit* *t=ha-wonga* *maliling* *ya*
1PL:INCL 1PL:INCL=CAUS-stay.awake.all.night night up
'we stayed awake all last night'

c. *manusia* *maleo* *l=surat* *john* *n=ha-surat* *tarus*
people other 3PL=write John 3SG=CAUS-write all.the.time
'other people write, John writes (on and on) all the time'

Hunzib (van den Berg 1995: 108)

(19) a. *maduhan-li-l* *ɑbu-g* *sɨ* *b-iλ'e-k'-er*
neighbour-OBL-ERG father-ADESS bear.4 4-kill-CAUS-PAST
'the neighbour made father kill the bear'

b. *maduhan-li-l* *ɑbu-g* *sɨ* *b-iλ'e-k'e-k'-er*
neighbour-OBL-ERG father-ADESS bear.4 4-kill-CAUS-CAUS-PAST
'the neighbour forced father to kill the bear'

In (16a), causativization introduces an agent into the underlying intransitive clause producing a transitive clause. In (16b), on the other hand, only one of the causative morphemes (CAUS1) has an agent introducing function. The second causative morpheme (CAUS2) has the function of stressing the total affectedness of the patient. There are no changes in agency. In (17b), causativization yields an agent that undergoes a more thorough change of state than the agent in (17a). The similarities with (16) are relatively obvious, because eating usually affects the agent in the most direct fashion, which means that the affectedness of the most directly affected participant is highlighted also in (17b) (see Naess 2007: Chapter 4 for a more detailed discussion of the semantics of 'eat'). Moreover, it is possible to claim that (17b) involves a more thoroughly affected patient too, because the amount of food consumed is probably greater than in (17a). In (18a) and (18b), the underlying clause is intransitive. The denoted events thus lack an affected (transitive) patient. The consequences of causativization in (18b) are, however, best discussed in terms of intensification. Examples (18a) and (18b) can in principle describe the same event, but (18b) may also be used to brag about how much fun was had at a big party (Bowden 2001: 202). In (18c), the use of the causative morpheme indicates a greater than usual duration of the denoted event, which is very closely related to a more intense nature of the performed action (Bowden: ibidem; see also Klamer 1998: 187 for Kambera). In (19), intensification refers to the fact that the causee is left

with less options as to whether or not to act. The action by the causer can also be seen as more intense, since the causer is putting more effort into causing the event to happen in (19b). This is signaled via double causativization of the verb. Intensification is a typical non-prototypical function of causativization, and cases similar to (16)–(19) are found in Komi-Zyrjan (Kalinina et al 2006: 455), Makwe (Devos 2004: 172) and in Austronesian languages in general (Himmelmann 2005: 170).

Even though the use of causative affixes for functions other than agent-related ones may appear somewhat odd at first, their use for these functions can also be explained by referring to the causative prototype. First, patients of intransitive events become targets of transitive events via causativization. They are not only patients, but targeted patients of transitive events. This feature is highlighted especially in (16) and (17) and also in (19), in which the energy flow from agent to patient is more forceful than normal. Second, a higher degree of patient affectedness usually also implies that the agent is acting in a more forceful manner making a real effort to modify the state of the patient, which is naturally an agent-related feature. In other words, causativization may be said to add to the denoted event a more intensively acting and thus more typical agent. The focus on patient-related features is very understandable if the denoted event already involves a volitional and controlling agent, as is the case in (16)–(19).

3.4.4. Other features of semantic transitivity

This subsection concerns features whose relation to semantic transitivity and especially to causation is less evident. Such features are also expressed by causative morphemes, although rather infrequently. They comprise dynamicization of events, expression of punctuality and definiteness of the patient (see Hopper & Thompson 1980: 252).

Dynamic events generally rank higher for semantic transitivity than (static) states, for example, because only dynamic events may involve an agent who is actively doing something that may ultimately affect another participant. States, in turn, cannot result in a change of state in another participant, because nothing that would possibly modify the state of another participant is occurring. Cora is a language in which a shift from static to dynamic events may be expressed by causative morphemes. Consider:

Cora (Vázquez Soto 2002: 212)

(20) a. *ɨ* *hámʷe? it,ízi-ce? i*
DET tortilla PL-hard
'the tortillas are hard'

b. *ɨ* *hámʷe?i* *t,ízi-u-ce?i-re-ka?a*
DET tortilla PL-CMP-hard-CAUS-PAST
'the tortillas got hard'

c. *ɨ* *sɨká* *hámʷe?i* *pú* *t,í?i-u-ce?i-re*
DET sun tortilla 3SG PL-CMP-HARD-CAUS
'as for the sun, it hardened the tortillas'

Example (20a) denotes a state. In (20b), the causative affix *-re* has been attached to the adjectival base of (20a). This produces an intransitive verb denoting a dynamic process with a clear outcome, i.e. the state of the tortillas has changed because of the denoted process. This processual nature is lacking in (20a). What is also interesting, and what also underlines the higher semantic transitivity of dynamic events, is that causativization produces a labile verb in (20b), which is evident if we take (20c) into account. It is possible to add an agent to (20b) without any further changes in verb morphology. A similar case is attested in Taba, in which causativization of Undergoer (unaccusative) intransitives usually produces Actor intransitives (unergatives). As in Cora, these verbs are labile (see Bowden 2001: 199).

Punctuality is expressed by causativization at least in Mari, as shown in (21):

Mari (Kalinina et al 2006: 444f)

(21) a. *jüšö* *jez* *pört-š-em* *jül-alt-eš*
drunk man house-3SG-ACC burn-CAUS-PAST-3SG
'a drunk man set the house on fire'

b. *meze* *küškö* *töršt-alt-en*
ball high bounce-CAUS-PAST:3SG
'the ball bounced high up'

In Mari, the causative morpheme *–alt* can express a variety of functions (see Kalinina et al: ibidem). In (21a), the morpheme has a prototypical causativizing function. In (21b), the number of arguments remains constant, and the effects of causativization are only semantic. With multiplicative (iterative) verbs such as 'bounce', causativization produces verbs denoting punctual events instead of iterative ones. Punctual events rank higher for semantic transitivity in that they have a clear endpoint and therefore a more salient outcome than iterative events.

The last feature of high semantic transitivity discussed here is illustrated by definiteness (of the patient). Individuation is mentioned as an important feature of semantic transitivity by Hopper & Thompson, and it has been shown that in a number of different languages only animate/definite patients can bear accusative or similar marking (see e.g. Comrie 1989[1981]: 128; also Lakoff 1987: 55). In Kwaza, causative morphemes may be used to underline the definiteness of the patient:

Kwaza (van der Voort 2004: 362)

(22) a. *'we-da-ki* *jere'xwa*
fear-1SG-DECL jaguar
'I am afraid of jaguars (in general)'

b. *we-'tja-da-ki* *jerexwa-'wã*
fear-CAUS-1SG-DECL jaguar-AO
'I am afraid of (this) jaguar'

In Kwaza, clauses profiling habitual or generic events have zero marked objects. These objects are indefinite and non-referential, because they appear in clauses that do not denote concrete events. It is possible to make the direct object definite and the denoted event concrete by causativizing the verbal predicate, as in (22b). Because events are in general more transitive than states (cf. above), the relation to a higher degree of semantic transitivity is very evident in (22) despite the fact that the relation to causation is less straightforward. It should be noted that van der Voort (2004: 362) explicitly states that the use of the causative morpheme in (22) is not very productive, and it only applies to a limited set of verbs. So even in Kwaza this cross-linguistically rare feature of causativization is infrequently attested. A similar case is found in Tariana (see Aikhenvald 2003: 273).

The cases discussed in (20)–(22) are related to the causative prototype in the least direct fashion. In light of this it is only natural that these functions are expressed by causative morphemes only in relatively few languages. This indirect relation of causativization is manifest also in the fact that (20) and (21) are intransitive clauses in which features of transitivity are less relevant for the coding of events than in transitive clauses. However, certain features of the causative prototype, especially those related to high semantic transitivity in general, are also useful here. First, the events denoted by causatives are dynamic in nature, which may very well make a contribution to the occurrence of cases such as (20). What is also interesting is that in both Cora and Taba, the two languages for which data is available here, the result of causativization is a labile

verb that can accommodate an agent without any other changes in verb morphology. We may thus say that causativization adds an agent to the verb valency in (20), but the agent does not surface obligatorily. This makes the association with the causative prototype even more obvious. Punctuality is also a feature of high semantic transitivity in that punctual events have a specific endpoint, something which iterative events lack. The expression of definiteness of the patient can also be explained by referring to the intimate relation of causativization and high transitivity. According to many scholars (see e.g. Hopper & Thompson 1980; Naess 2004), animate/definite patients are more affected by events than indefinite/inanimate ones. In light of this, the occurrence of cases such as (22) is not unduly surprising. Moreover, habitual events, as in (22a), lack a genuine, active agent, which is introduced by causativization in (22b). In contrast to the causative prototype, the focus is not on the agent introduction, but on the features that follow from that.

4. Summary

This paper has examined non-prototypical uses of causative morphemes. It has been shown that the use of causative morphemes is by no means confined to the causative prototype and agent introduction, but that these can also serve an array of other functions across languages. Three major types, labeled covert causativization, agentivization and transitivization were examined. The proposed typology was meant as a taxonomy of different instances of non-prototypical causativization, not as a typology of languages. That is, a single language may – and many languages do – have causative morphemes that express more than one of the examined functions.

The data and discussion in this paper have shown that causativization comprises two major types. The first of these is represented by cases in which the number of participants in the denoted event increases, while in the second type the number of participants is maintained. The first type can be further divided into two, according to whether the added participants can be overtly expressed or not (this constitutes the difference between prototypical causativization and covert causativization). The second subtype, in turn, can be subdivided according to whether causativization affects features of agency or rather transitivity in general (the first type was discussed under agentivization, the latter under transitivization). This division is real both formally and

semantically. For example, it is manifested formally through the differences between prototypical causativization and agentivization and transitivization.

Even though causativization has been divided here into two, based on the effects causativization has on causativized clauses discussed in this paper, it is important to note that the characteristic feature of causativization is nevertheless represented by agent introduction. First, linguistic elements are viewed as causative morphemes only if they have the ability to add an agent to the valency of verbs. Second, the great majority of the cases examined in this paper are explainable by agent-adding aspects of causativization. Transitivization is not so straightforwardly explained by agent introduction, but here too agency and its association with high semantic transitivity make a contribution. In other instances of transitivization, the association is somewhat less obvious and the occurrence of these cases is best explained by high semantic transitivity related to causation in general. To summarize, despite the occurrence of a number of unorthodox cases, the introduction of an agent is unarguably the central feature of causativization.

As noted in the introduction, one of the goals of this paper was to make possible another kind of approach to causatives by providing an overview of the most important non-prototypical uses that causative morphemes may have across languages. The focus here has been on illustrating the different cases, in addition to which the rationale behind the examined cases has also been discussed. The paper has not discussed the frequencies of the attested types nor potential correlations between them in any way. First, it is difficult to draw any broad generalizations from such a small number of languages (data are sparse in reference grammars). Second, it would be interesting to study whether certain functions seem to imply the presence of other non-prototypical function(s) related to causativization (e.g. whether a language that expresses transitivization by causative morphemes will also use causative morphemes for agentivization). Thus I very much hope that other scholars (especially field linguists) will take interest in non-prototypical uses of causatives, and that these (and other) aspects of causatives will be discussed in the future.

Abbreviations

A = Agent; ABS = Absolutive; ACC = Accusative; ADESS = Adessive; AGR = Agreement marker; ALL = Allative; AO = Animate object; ART = Article; CAUS = Causative; CONT = Continuative; CORE = Core argument; DAT = Dative; DECL = Declarative; DEF = Definite; DET = Determiner; ERG = Ergative; FEM = Feminine; INCL = Inclusive; IND = Indicative;

INFR = Inferred; INSTR = Instrument; IO = Indirect object; LAT = Lative; LOC = Locative; LOCUT = Locutor; MASC = Masculine; NOM = Nominative; NON.A/S = Non-Agent/Subject; NONFUT = Non-future tense; NONLOCUT = Non-locutor; NONPAST = Non-past tense; OBJ = Object; OBL = Oblique; PART = Partitive; PAST = Past tense; PAST.WIT = Witnessed past; PERF = Perfective; PL = Plural; PN = Personal name; POSS = Possessive; PRES = Present tense; R = Realis; REDUP = Reduplication; REM.PAST = Remote past; SG = Singular; SUBJ = Subject; TENSE = Tense marker; TOP = Topic.

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Author's address
Department of General Linguistics
P.O. Box 9
FI–00014 University of Helsinki, Finland
e-mail: kittila@mappi.helsinki.fi

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